



Trabuco Canyon Water District

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Trabuco Canyon Water District

2003 Water Quality Report

The 2003 Water Quality Report

Drinking Water Quality

Since 1990, California water utilities have been providing an annual Water Quality Report to their customers. This year's report covers calendar year 2002 water quality testing and has been prepared in compliance with new regulations called for in the 1996 reauthorization of the Safe Drinking Water Act. The reauthorization charged the United States Environmental Protection Agency (EPA) with updating and strengthening the tap water regulatory program and changed the report's due date to July 1.

EPA and the California Department of Health Services (DHS) are the agencies responsible for establishing drinking water quality standards. To ensure that your tap water is safe to drink, The EPA and DHS prescribe regulations that limit the amount

of certain contaminants in water provided by public water systems. DHS regulations also establish limits for contaminants in bottled water that must provide the same protection for public health. The federal Food and Drug Administration (FDA) also sets regulations for bottled water.

The Trabuco Canyon Water District (TCWD) vigilantly safeguards its water supply and, as in years past,

the water delivered to your home meets the standards required by the state and federal regulatory agencies. In some cases, TCWD goes beyond what is required to monitor for additional contaminants that have known health risks. The contaminants listed below, specifically including MTBE, were NOT DETECTED in TCWD'S water during 2002.

Unregulated contaminant monitoring helps EPA determine where certain contaminants occur and whether it needs to establish regulations for those contaminants.

This information is important. Have someone translate it for you.

これは重要な情報ですので、翻訳を依頼してください。

Esta información es importante. Por favor pídale a alguien que se la traduzca.

此乃重要資料，必須請人替您翻譯。

معلومات هامة جداً. يرجى طلب شخص يترجمها لك.

이 자료는 매우 중요한 것입니다. 그러므로 영어를 할 수 있는 사람에게 번역해 줄 것을 부탁드립니다.

Bản báo cáo này có những tin tức quan trọng về nước uống của quý vị.
Hãy dịch ra hoặc nói chuyện với những ai thông hiểu.

If you have any questions about your water, please contact us for answers...

For information about this report, or your water quality in general, please contact Kris Hanberg at (949) 858-0277. The Water District Board of Directors meets the third Wednesday of each month at 7:00 p.m. at the District's Administration Building located at 32003 Dove Canyon Drive, Trabuco Canyon, California 92679. The public is encouraged to attend.

For more information about the health effects of the listed contaminants in the following tables, call the Environmental Protection Agency hotline at (800) 426-4791.

What You Need to Know, ...and How it May Affect You

Sources of Supply

Your drinking water is a blend of mostly groundwater from the Orange County groundwater basin and also surface water imported by the Metropolitan Water District of Southern California. Metropolitan's imported water source is mostly the Colorado River, with augmentation by the State Water project from northern California. Your groundwater comes from a natural underground reservoir managed by the Orange County Water District that stretches from the Prado Dam and fans across the northwestern portion of Orange County, excluding the communities of Brea and La Habra, and stretching as far south as the El Toro 'Y'. Your groundwater comes from the Lang Well, the Rose Well, and the U.S. Well.

Government Regulations of Potential Contaminants

Drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. As water travels over the surface of the land or through the layers of the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of human or animal activity. For most people, the presence of contaminants does not necessarily mean water may be a health risk.

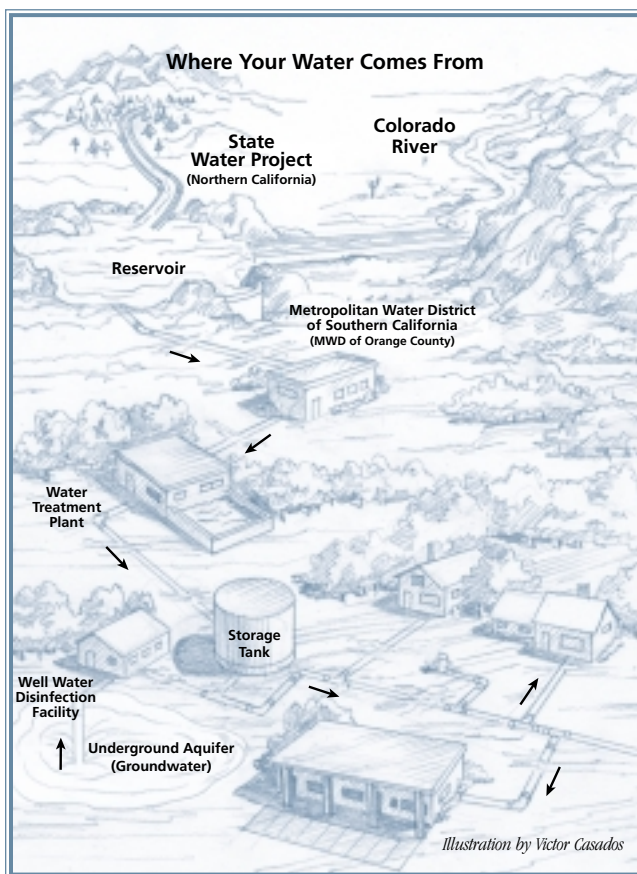
Contaminants that may be present in source water include:

- ◆ Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- ◆ Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining and farming.
- ◆ Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production or mining activities.
- ◆ Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- ◆ Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gasoline stations, urban storm water runoff and septic systems.

Cryptosporidium

Cryptosporidium is a microscopic organism that, when ingested, can cause diarrhea, fever, and other gastrointestinal symptoms. The organism comes from animal and/or human wastes and may be in surface water. The Metropolitan Water District of Southern California, which did not detect it in the water, tested your surface water for *Cryptosporidium* in 2002. If it ever is detected, *Cryptosporidium* is eliminated by an effective treatment combination including sedimentation, filtration and disinfection.

The EPA and the Federal Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from EPA's safe drinking water hotline at (800) 426-4791 between 9 a.m. and 5 p.m. Eastern Time (6 a.m. to 2 p.m. in California).



Water Distribution System: Imported water supplied by Metropolitan Water District of Southern California (via MWD of Orange County) and piped to your community by your local water retailer. Local groundwater is pumped out of the ground and provided by your local water retailer.

Immuno-compromised people

Some people may be more vulnerable to constituents in the water than the general population. Immuno-compromised people, such as those with cancer who are undergoing chemotherapy, persons who have had organ transplants, people with HIV/AIDS or other immune system disorders, some elderly persons and infants can be particularly at risk of infections. These people should seek advice about drinking water from their healthcare providers.

Trihalomethanes and Disinfection

Trihalomethanes (THMs) are a family of chemicals formed when a disinfectant such as chlorine is added to the water supply. Disinfection is an important and necessary step in the water treatment process to protect against harmful bacteria and other possible contamination. Chlorine is the most widely used and approved disinfectant in the United States. TCWD clarifies the water prior to the addition of chlorine as a way to reduce the Trihalomethanes in your water.

The amount of THMs allowed in drinking water is regulated by the EPA, which has set an annual average safe limit for THMs of 80 parts-per-billion in drinking water. Results of a health study released in early 1998 suggest that women who drink five glasses of tap water daily and are in their first three months of pregnancy may have an increased risk of miscarriage from levels of THMs greater than 75 parts-per-billion in drinking water. State officials, however, have cautioned that the study is not definitive and have stated that more study on the issue is needed.

Import (Metropolitan) Water Assessment

In December 2002, Metropolitan Water District of Southern California completed its source water assessment of its Colorado River and State Water Project supplies. Colorado River supplies are considered to be most vulnerable to recreation, urban/storm water runoff, increasing urbanization in the watershed and wastewater. State Water Project supplies are considered to be most vulnerable to urban/storm water runoff, wildlife, agriculture, recreation and wastewater. A copy of the assessment can be obtained by contacting Metropolitan by phone at (213) 217-6850.

Source Water Assessment

An assessment of the drinking water sources for Trabuco Canyon Water District was completed in November 2002. The water sources are considered most vulnerable to contaminants associated with historic gas stations, septic systems, agricultural/irrigation wells, above and below ground storage tanks

and mining activities. There have been no contaminants detected in TCWD'S water associated with these activities. The only detections of contaminants are associated with naturally occurring salts, naturally occurring radiochemicals, and low level organics. A copy of the complete assessment is available at Trabuco Canyon Water District. You may request that a summary of the assessment be sent to you by contacting Kris Hanberg at (949) 858-0277.

Contaminants Not Detected

The Trabuco Canyon Water District (TCWD) vigilantly safeguards its water supply and, as in years past, the water delivered to your home meets the standards required by the state and federal regulatory agencies. In some cases, TCWD goes beyond what is required to monitor for additional contaminants that have known health risks. The contaminants listed below, specifically including Chromium and MTBE, were NOT DETECTED in TCWD'S water during 2002.

| | | |
|-----------------------------|---------------------------|----------------------------------|
| 1,1-Dichloroethane | Butyl Benzylphthalate | Methoxychlor |
| 1,1,1-Trichloroethane | Cadmium | Molinate (Ordram) |
| 1,1,2-Trichloroethane | Chlordane | Methyl Paraoxon |
| 1,1,2,2-Tetrachloroethane | Chlorpropham | Methyl-tert-butyl ether [MTBE] |
| 1,2-Dichlorobenzene (o-DCB) | Chlorothalonil | Nickel |
| 1,2-Dichloroethane | Chromium | Nitrogen Phosphorous Pesticides |
| 1,2-Dichloromethane | Cis-1,2-Dichloroethene | PCBs (Polychlorinated biphenyls) |
| 1,2-Dichloropropane | Copper | Pebulate |
| 1,2,4-Trichlorobenzene | Diazinon | Pentachlorophenol |
| 1,2,4-Trimethylbenzene | Dichlorofluoromethane | Phenanthrene |
| 1,3-Dichloropropane | Dichlorvos | Selenium |
| 1,4-Dichlorobenzene (p-DCB) | Diphenamid | Simazine |
| 2,4,5-TP | Disulfoton | Styrene |
| 2-Chlorobiphenyl | Endrin | Thallium |
| Acenaphthalene | EPTC | Toluene |
| Alachlor | Ethoprop | Total Coliform Bacteria |
| Anthracene | Ethylbenzene | Toxaphene |
| Antimony | Fecal coliform and E.coli | Trans-1,2-Dichloroethene |
| Arsenic | Fluridone | Trichloroethene |
| Atrazine | Heptachlor | Trichlorofluoromethane |
| Benzene | Heptachlor epoxide | Vinyl Chloride |
| Benzo(a)pyrene (PAH) | Hexachlorobenzene | Xylenes |
| Beryllium | Hexachlorocyclopentadiene | |
| Bromacil | Lead | |
| | Mercury (inorganic) | |

Definitions

Public Health Goal (PHG)

The level of a contaminant in drinking water below which there is no known or expected risk to health. Public health goals are set by the California Environmental Protection Agency.

Maximum Contaminant Level Goal (MCLG)

The level of contaminant in drinking water below which there is no known or expected risk to health. Maximum contaminant level goals are set by the EPA.

Maximum Contaminant Level (MCL)

The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the public health goals and maximum contaminant level goals as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste and appearance of drinking water.

Primary Drinking Water Standard (PDWS)

MCL's for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Treatment Technique

A required process intended to reduce the level of a contaminant in drinking water.

Regulatory Action Level

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Variance

State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Measurements

Water is sampled and tested throughout the year. Contaminants are measured in parts per million (ppm), parts per billion (ppb), parts per trillion (ppt), and even parts per quadrillion (ppq).

The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

Trabuco Canyon Water District Groundwater Quality

| Chemical | MCL | PHG (MCLG) | Average Amount | Range of Detections | MCL Violation? | Most Recent Sampling Date | Typical Source of Contaminant |
|--------------------------------|----------|------------|----------------|---------------------|----------------|---------------------------|-------------------------------|
| Radiologicals | | | | | | | |
| Alpha Radiation (pCi/L) | 15 | 0.5 | <1 | ND – 1.0 | No | 2002 | Erosion of Natural Deposits |
| Inorganic Chemicals | | | | | | | |
| Aluminum (ppm) | 1 / 0.2* | 0.6 | 0.14 | ND – 0.20 | No | 2002 | Erosion of Natural Deposits |
| Barium (ppm) | 1 | (2) | <0.1 | ND – 0.2 | No | 2002 | Erosion of Natural Deposits |
| Fluoride (ppm) | 2 | 1 | 0.34 | ND – 0.80 | No | 2002 | Erosion of Natural Deposits |
| Nitrate (ppm as N) | 10 | 10 | 1.7 | ND – 2.0 | No | 2002 | Fertilizers, Septic Tanks |
| Nitrate + Nitrite (ppm as N) | 10 | 10 | 1.7 | ND – 2.0 | No | 2002 | Fertilizers, Septic Tanks |
| Secondary Standards* | | | | | | | |
| Chloride (ppm) | 500* | n/a | 26 | 23 – 30 | No | 2002 | Erosion of Natural Deposits |
| Color (color units) | 15* | n/a | 1 | 1 | No | 2002 | Erosion of Natural Deposits |
| Odor (threshold odor number) | 3* | n/a | 1 | 1 | No | 2002 | Erosion of Natural Deposits |
| Specific Conductance (µmho/cm) | 1,600* | n/a | 714 | 511 – 800 | No | 2002 | Erosion of Natural Deposits |
| Sulfate (ppm) | 500* | n/a | 172 | 155 – 210 | No | 2002 | Erosion of Natural Deposits |
| Total Dissolved Solids (ppm) | 1,000* | n/a | 518 | 360 – 650 | No | 2002 | Erosion of Natural Deposits |
| Turbidity (ntu) | 5* | n/a | 0.27 | 0.13 – 0.50 | No | 2002 | Erosion of Natural Deposits |

Unregulated Contaminants Requiring Monitoring

| | | | | | | | |
|---|---------------|-----|-----|-----------|-----|------|-----------------------------|
| Calcium (ppm) | Not Regulated | n/a | 105 | 90 – 110 | n/a | 2002 | Erosion of natural deposits |
| Hexavalent Chromium (ppb) | Not Regulated | n/a | <1 | ND – 5.0 | n/a | 2002 | Erosion of natural deposits |
| Magnesium (ppm) | Not Regulated | n/a | 23 | 20 – 24 | n/a | 2002 | Erosion of natural deposits |
| Potassium (ppm) | Not Regulated | n/a | 1.3 | 1.2 – 1.4 | n/a | 2002 | Erosion of natural deposits |
| pH (units) | Not Regulated | n/a | 7.2 | 7.0 – 7.4 | n/a | 2002 | Erosion of natural deposits |
| Sodium (ppm) | Not Regulated | n/a | 29 | 27 – 31 | n/a | 2002 | Erosion of natural deposits |
| Total Alkalinity (ppm) | Not Regulated | n/a | 178 | 160 – 200 | n/a | 2002 | Erosion of natural deposits |
| Total Hardness CaCO ₃ (ppm) | Not Regulated | n/a | 300 | 283 – 346 | n/a | 2002 | Erosion of natural deposits |
| Total Hardness CaCO ₃ (grains/gal) | Not Regulated | n/a | 18 | 17 – 20 | n/a | 2002 | Erosion of natural deposits |

ppb = parts-per-billion; ppm = parts-per-million; pCi/L = picoCuries per liter; ntu = nephelometric turbidity units; ND = not detected; n/a = not applicable;
 < = average is less than the detection limit for reporting purposes; MCL = Maximum Contaminant Level; (MCLG) = federal MCL Goal; PHG = California Public Health Goal
 *Contaminant is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color).

Trabuco Canyon Water District Dimension Water Treatment Plant

| Chemical | MCL | PHG, or (MCLG) | Average Amount | Range of Detections | MCL Violation? | Typical Source of Contaminant |
|--------------------------------|----------|----------------|----------------|---------------------|----------------|-------------------------------|
| Radiologicals | | | | | | |
| Alpha Radiation (pCi/L) | 15 | n/a | 2.6 | ND – 4.5 | No | Erosion of natural deposits |
| Uranium (pCi/L) | 20 | 0.5 | 1.0 | ND – 3.6 | No | Erosion of natural deposits |
| Inorganic Chemicals | | | | | | |
| Barium (ppm) | 1 | (2) | 0.1 | 0.1 | No | Erosion of natural deposits |
| Aluminum (ppm) | 1 / 0.2* | 0.6 | 0.31 | 0.31 | No | Water treatment chemical |
| Fluoride (ppm) | 2 | 1 | 0.45 | 0.45 | No | Erosion of natural deposits |
| Nitrate (ppm as N) | 10 | 10 | 0.3 | 0.3 | No | Fertilizers, Septic Tanks |
| Nitrate + Nitrite (ppm as N) | 10 | 10 | 0.3 | 0.3 | No | Fertilizers, Septic Tanks |
| Secondary Standards* | | | | | | |
| Chloride (ppm) | 500* | n/a | 74 | 74 | No | Erosion of natural deposits |
| Color (color units) | 15* | n/a | 1 | 1 | No | Erosion of natural deposits |
| Odor (threshold odor number) | 3* | n/a | 1 | 1 | No | Erosion of natural deposits |
| Specific Conductance (µmho/cm) | 1,600* | n/a | 843 | 843 | No | Erosion of natural deposits |
| Sulfate (ppm) | 500* | n/a | 260 | 260 | No | Erosion of natural deposits |
| Total Dissolved Solids (ppm) | 1,000* | n/a | 590 | 590 | No | Erosion of natural deposits |

Unregulated Contaminants Requiring Monitoring

| | | | | | | |
|---|---------------|-----|-----|----------|-----|--|
| Calcium (ppm) | Not Regulated | n/a | 82 | 82 | n/a | Erosion of natural deposits |
| Magnesium (ppm) | Not Regulated | n/a | 27 | 27 | n/a | Erosion of natural deposits |
| Perchlorate (ppb) | Not Regulated | n/a | <4 | ND – 4.0 | n/a | Rocket fuel discharged to the Colorado River |
| Potassium (ppm) | Not Regulated | n/a | 4.0 | 4.0 | n/a | Erosion of natural deposits |
| pH (units) | Not Regulated | n/a | 7.6 | 7.6 | n/a | Erosion of natural deposits |
| Sodium (ppm) | Not Regulated | n/a | 84 | 84 | n/a | Erosion of natural deposits |
| Total Alkalinity (ppm) | Not Regulated | n/a | 160 | 160 | n/a | Erosion of natural deposits |
| Total Hardness CaCO ₃ (ppm) | Not Regulated | n/a | 317 | 317 | n/a | Erosion of natural deposits |
| Total Hardness CaCO ₃ (grains/gal) | Not Regulated | n/a | 18 | 18 | n/a | Erosion of natural deposits |

ppb = parts-per-billion; ppm = parts-per-million; pCi/L = picoCuries per liter; ntu = nephelometric turbidity units; ND = not detected; n/a = not applicable;
 < = average is less than the detection limit for reporting purposes; MCL = Maximum Contaminant Level; (MCLG) = federal MCL Goal; PHG = California Public Health Goal
 *Contaminant is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color).

| Turbidity - combined filter effluent | Treatment Technique | Turbidity Measurements | TT Violation? | Typical Source of Contaminant |
|--|---------------------|------------------------|---------------|-------------------------------|
| 1) Highest single turbidity measurement | 0.3 NTU | 0.14 | No | Soil run-off |
| 2) Percentage of samples less than 0.5 NTU | 95% | 100 | No | Soil run-off |

Turbidity is a measure of the cloudiness of the water, an indication of particulate matter, some of which might include harmful microorganisms. Low turbidity in Trabuco Canyon Water District's treated water is a good indicator of effective filtration. Filtration is called a treatment technique. A treatment technique is a required process intended to reduce the level of contaminants in drinking water that are difficult and sometimes impossible to measure directly.

Trabuco Canyon Water District Distribution System Water Quality

| | MCL (MRDL/MRDLG) | Average Amount | Range of Detections | MCL Violation? | Typical Source of Contaminant |
|------------------------------|------------------|----------------|---------------------|----------------|-------------------------------------|
| Total Trihalomethanes (ppb) | 80 | 41 | ND – 74 | No | Byproducts of chlorine disinfection |
| Haloacetic Acids (ppb) | 60 | 27 | ND – 74 | No | Byproducts of chlorine disinfection |
| Chlorine Residual (ppm) | (4 / 4) | 0.8 | ND – 2.0 | No | Disinfectant added for treatment |
| Color (color units) | 15* | 1 | 1 | No | Erosion of natural deposits |
| Odor (threshold odor number) | 3* | 1 | 1 | No | Erosion of natural deposits |
| Turbidity (ntu) | 5* | 0.17 | 0.17 – 0.41 | No | Erosion of natural deposits |

Thirteen locations in the distribution system are tested quarterly for total trihalomethanes and haloacetic acids; twelve locations are tested monthly for color, odor and turbidity.

MRDL = Maximum Residual Disinfectant Level; MRDLG = Maximum Residual Disinfectant Level Goal; ntu = nephelometric turbidity units; ND = not detected

*Contaminant is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color).

Lead and Copper Action Levels at Residential Taps

| | Action Level (AL) | Health Goal | 90th Percentile Value | Sites Exceeding AL / Number of Sites | AL Violation? | Typical Source of Contaminant |
|--------------|-------------------|-------------|-----------------------|--------------------------------------|---------------|---------------------------------|
| Lead (ppb) | 15 | 2 | <5 | 0 / 32 | No | Corrosion of household plumbing |
| Copper (ppm) | 1.3 | 0.17 | 0.06 | 0 / 32 | No | Corrosion of household plumbing |

Every three years, at least 30 residences are tested for lead and copper at-the-tap. The most recent set of samples was collected in 2002. Lead was detected in four homes, but no sample exceeded the action level. Copper was detected in all samples, but none exceeded the action level. The regulatory action level is the concentration which, if exceeded in more than ten percent of the homes tested, triggers treatment or other requirements which a water system must follow. Trabuco Canyon Water District complied with the lead and copper action levels.

Metropolitan Water District of Southern California Treated Surface Water

| Chemical | MCL | PHG, or (MCLG) | Average Amount | Range of Detections | MCL Violation? | Typical Source of Contaminant |
|----------|-----|----------------|----------------|---------------------|----------------|-------------------------------|
|----------|-----|----------------|----------------|---------------------|----------------|-------------------------------|

Radiologicals – Tested in 1999

| | | | | | | |
|-------------------------|----|-----|-----|-----------|----|---------------------------------------|
| Alpha Radiation (pCi/L) | 15 | n/a | 3.6 | 1.2 – 6.0 | No | Erosion of natural deposits |
| Beta Radiation (pCi/L) | 50 | n/a | 6.2 | 5.2 – 7.8 | No | Decay of man-made or natural deposits |
| Combined Radium (pCi/L) | 5 | n/a | 0.6 | ND – 1.5 | No | Erosion of natural deposits |
| Uranium (pCi/L) | 20 | 0.5 | 2.6 | ND – 3.8 | No | Erosion of natural deposits |

Inorganic Chemicals – Tested in 2002

| | | | | | | |
|--------------------------------|----|----|------|-------------|----|-------------------------------|
| Fluoride (ppm) | 2 | 1 | 0.23 | 0.20 – 0.27 | No | Erosion of natural deposits |
| Nitrate and Nitrite as N (ppm) | 10 | 10 | <0.4 | ND – 0.5 | No | Agriculture runoff and sewage |
| Nitrate as N (ppm) | 10 | 10 | <0.4 | ND – 0.5 | No | Agriculture runoff and sewage |

Secondary Standards* – Tested in 2002

| | | | | | | |
|--------------------------------|---------------|-----|------|-------------|----|--|
| Chloride (ppm) | 500* | n/a | 86 | 76 – 98 | No | Runoff or leaching from natural deposits |
| Color (color units) | 15* | n/a | 2 | 1 – 3 | No | Runoff or leaching from natural deposits |
| Corrosivity (LSI) | non-corrosive | n/a | 0.23 | 0.17 – 0.26 | No | Elemental balance in water |
| Specific Conductance (µmho/cm) | 1,600* | n/a | 843 | 768 – 939 | No | Substances that form ions in water |
| Sulfate (ppm) | 500* | n/a | 171 | 126 – 207 | No | Runoff or leaching of natural deposits |
| Total Dissolved Solids (ppm) | 1,000* | n/a | 499 | 434 – 567 | No | Runoff or leaching of natural deposits |
| Turbidity (NTU) | 5* | n/a | 0.06 | 0.05 – 0.07 | No | Runoff or leaching of natural deposits |

Unregulated Chemicals – Tested in 2002

| | | | | | | |
|-----------------------|---------------|-----|-----|-----------|-----|--|
| Alkalinity (ppm) | Not Regulated | n/a | 111 | 95 – 124 | n/a | Runoff or leaching from natural deposits |
| Boron (ppb) | Not Regulated | n/a | 130 | 110 – 130 | n/a | Runoff or leaching from natural deposits |
| Calcium (ppm) | Not Regulated | n/a | 54 | 43 – 63 | n/a | Runoff or leaching from natural deposits |
| Magnesium (ppm) | Not Regulated | n/a | 24 | 21 – 26 | n/a | Runoff or leaching from natural deposits |
| Perchlorate (ppb) | Not Regulated | n/a | <4 | ND – 4 | n/a | Rocket fuel discharged to the Colorado River |
| pH (pH units) | Not Regulated | n/a | 8 | 8 | n/a | Hydrogen ion concentration |
| Potassium (ppm) | Not Regulated | n/a | 3.9 | 3.7 – 4.2 | n/a | Runoff or leaching from natural deposits |
| Sodium (ppm) | Not Regulated | n/a | 80 | 74 – 89 | n/a | Runoff or leaching from natural deposits |
| Hardness (ppm) | Not Regulated | n/a | 232 | 192 – 258 | n/a | Runoff or leaching of natural deposits |
| Hardness (grains/gal) | Not Regulated | n/a | 14 | 11 – 15 | n/a | Runoff or leaching of natural deposits |

ppb = parts-per-billion; ppm = parts-per-million; pCi/L = picoCuries per liter; NTU = nephelometric turbidity unit; ND = not detected; < = average is less than the detection limit for reporting purposes;

MCL = Maximum Contaminant Level; (MCLG) = federal MCL Goal; PHG = California Public Health Goal; n/a = not applicable; LSI = Langelier Saturation Index; µmho/cm = micromho per centimeter

* Contaminant is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color).

| Turbidity - combined filter effluent | Treatment Technique | Turbidity Measurements | TT Violation? | Typical Source of Contaminant |
|--|---------------------|------------------------|---------------|-------------------------------|
| 1) Highest single turbidity measurement | 0.3 NTU | 0.14 | No | Soil run-off |
| 2) Percentage of samples less than 0.3 NTU | 95% | 100 | No | Soil run-off |

Turbidity is a measure of the cloudiness of the water, an indication of particulate matter, some of which might include harmful microorganisms. Low turbidity in Metropolitan's treated water is a good indicator of effective filtration. Filtration is called a treatment technique.(TT). A treatment technique is a required process intended to reduce the level of contaminants in drinking water that are difficult and sometimes impossible to measure directly. ntu = nephelometric turbidity unit

Information Collection Rule Disinfection By-Products in Metropolitan Water District Finished Water Data Collected August 1997 - November 1998

| Chemical | Average Amount (ppb) | Range of Detections (ppb) | Typical Source of Contaminant |
|----------|----------------------|---------------------------|-------------------------------|
|----------|----------------------|---------------------------|-------------------------------|

Disinfection By-Products

| | | | |
|-----------------------|-----|-----------|---|
| Haloacetonitriles | 7.6 | 5.1 – 11 | Formed by the reaction with chlorine disinfectant |
| Haloketones | 1.7 | 0.7 – 2.7 | Formed by the reaction with chlorine disinfectant |
| Chloral Hydrate | 3.8 | 1.5 – 6.1 | Formed by the reaction with chlorine disinfectant |
| Total Organic Halogen | 113 | 78 – 155 | Formed by the reaction with chlorine disinfectant |
| Cyanogen Chloride | 1.7 | 0.5 – 2.3 | Formed by the reaction with chlorine disinfectant |

The Information Collection Rule (ICR) is a multi-year national monitoring program administered by the U.S. Environmental Protection Agency. The primary purpose of the ICR is to gather nationwide occurrence data on chemicals which may be formed during drinking water disinfection. The results of the ICR will assist the EPA in regulating many of these disinfection by-products over the next 5 years.

ppb = parts-per-billion.